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United States Patent

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*Bence Lehman*

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Attest

**United States Patent** [19]  
**Ishibashi et al.**

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[54] **FIBER OPTIC MODULE**

3-218134 9/1991 Japan  
2087681 5/1982 United Kingdom

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**361/761, 783; 385/88-94**

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**58 Claims, 18 Drawing Sheets**

[57] **ABSTRACT**

A fiber optic module includes a connector connected to a mother board of a host computer, an LD semiconductor IC for converting serial data received from the mother board to an LD electric signal for a laser diode, an LD module for converting the LD electric signal to an LD optical signal, a PD module for converting a photodiode optical signal to a PD electric signal, a PD semiconductor IC for converting the PD electric signal to PD serial data, a circuit board having the connector and carrying LD semiconductor IC and PD semiconductor IC, an LD shielding plate and a PD shielding plate for electrically shielding the LD module and the PD module, respectively, a first frame and a second frame for holding the circuit board, LD module and PD module. In the fiber optic module, the connector is of a surface mounting type, leads of the LD and PD modules are connected to a side of the circuit board mounted with the connector, the circuit board has an LD variable resistor for adjusting a drive current of the LD module, the LD variable resistor is provided to a side of the circuit board opposite to the connector, the circuit board has a PD variable resistor provided to the side of the circuit board opposite to the connector for detecting a signal of the PD module, 3 signal processing semiconductor ICs or less are provided.

